



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,781	10/23/2003	Changyong Lee	4220-123 US	7161

7590 03/24/2010
Diane Dunn McKay, Esq.
Mathews, Collins, Shepherd & McKay, P.A.
Suite 306
100 Thanet Circle
Princeton, NJ 08540

EXAMINER

BEKKER, KELLY JO

ART UNIT	PAPER NUMBER
----------	--------------

1794

MAIL DATE	DELIVERY MODE
-----------	---------------

03/24/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/691,781	Applicant(s) LEE ET AL.	
	Examiner KELLY BEKKER	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Amendments made February 5, 2010 have been entered.
Claim 4 remains pending.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 5, 2010 has been entered.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The 103(a) rejection of claim 4 as being unpatentable over Komatsu et al. (US 3892058) in view of Meyer et al (US 6139898) has been withdrawn in light of applicant's amendments made February 5, 2010. Specifically the references do not teach adding an amount of a solution of emulsified oil to the sterilized rice before the step of cooking and adding the same amount of the emulsified oil solution to the rice after cooking.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Komatsu et al. (US 3892058) in view of the combination of Meyer et al (US 6139898) and Applicant's Admitted Prior Art (Specification pages 1-2) and Bittman (How to Cook Everything, Wiley 1998, pages 181, 182, 197-199, and 207).

Komatsu et al. (Komatsu) teaches of a process for high temperature and high pressure short time sterilization in plastic packaging (Abstract). Komatsu (Abstract, Column 5 lines 20-27, and Column 15 lines 30-44) teaches of placing or filling the food product in a heat resistant plastic container prior to sterilization. Komatsu teaches that

Art Unit: 1794

the sterilization after filling into a container is at a temperature of 130-160C, high pressure, and a sterilization time of 30 seconds-15 minutes (Column 15 lines 30-44 and Column 17 lines 5-20). Komatsu teaches that the sterilization is completed by applying high temperature high pressure hot water, which would be steam (Column 15 lines 63-67). Komatsu teaches that the sterilized food is semi-cooked and thus is cooked after sterilization and before consumption (Column 11 lines 1-12). Komatsu teaches that the process and packaging are to be utilized for food articles that are intended to be highly preservable and that enzymatically brown and lose natural colors, flavor, and texture upon conventional heat sterilization processes (Column 11 lines 7-12, Column 17 line 63 through Column 18 line 36). Note: Claim 4 recites a sterilization step, which occurs 4-10 times repeatedly for 4-8 seconds. Since the sterilization step, as instantly claimed, occurs repeatedly and without interruption, one of ordinary skill in the art would expect that the sterilization step, as instantly claimed, would be functionally equivalent to a one-time sterilization process occurring for 16 to 80 seconds, absent any clear and convincing arguments to the contrary. Alternatively it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform either one or many sterilization steps until the desired result was achieved, and one of ordinary skill in the art would expect both processes to yield equally effective results.

Komatsu is silent to the process as including long grain rice, to the rice as washed with purified water, then coated with a solution of emulsified oil, then drained of excess water, and then filled into a packaging for sterilization, to adding an amount of a solution of emulsified oil to the sterilized rice before the step of cooking and adding the same amount of the emulsified oil solution to the rice after cooking, to the rice as cooked in a solution of emulsified oil, and to sealing and packaging the resultant cooked rice.

Meyer teaches that the partially or fully cooked rice is soaked in water and advantageously coated with emulsified oil to provide a full moisture shelf stable product with outstanding organoleptic properties. Refer specifically to Abstract, Column 1 lines 29-31 and 55-67, and Column 2 lines 1-26. Meyer teaches that the rice is washed in water to minimize starch losses and open up the structure of the grain in order to

Art Unit: 1794

facilitate heat transfer and water uptake during blanching (Column 2 lines 5-15). Meyer teaches that excess water is drained from the rice prior to packaging and sterilization (Column 2 line 53 through Column 3 line 17). Meyer teaches that it is desirable to coat the rice grain with emulsified oil at a process step before packaging and later cook the rice grains in the emulsified oil (Column 1 line 63 through Column 2 line 4 and Column 3 lines 7-9 and 27-34). Meyer teaches that the emulsifiers are advantageously added to the oil in order to assist in coating the surface of the rice grains (Column 1 line 67 through Column 2 line 4). Meyer teaches that the final product is not intended to need cooking by the consumer but only heated up for a short period of time after unpackaging (Column 3 lines 27-34).

Applicant admits, Specification, Background of the Invention pages 1-2, that rice was a food product which was known to lose natural colors, flavor, and texture upon conventional heat sterilization processes. Applicant admits, page 1, that long grain rice was produced most in the world and has much fluffiness and crumblyness when cooked.

Bittman teaches there are two basic kinds of rice grains: long grain and short grain. Bittman teaches that the majority of rice eaten in the US is long grain rice which cooks in separate, firm, dry, kernels. Bittman teaches that short grain rice cooks soft, moist, and sticky. Refer specifically to page 197 Column 1. Bittman teaches that cooking rice is easy and can be preformed like cooking pasta (page 198 column 2). Bittman teaches that grains, including rice and pasta are cooked in water or in a water and oil combination (page 181 all and page 182 column 1). Bittman teaches that oils can be used to flavor precooked grains (page 182, Precooked grains with Butter or Oil). Bittman teaches that butter or oil is added to the cooking water to prevent sticking of the rice (Basic Long-grain Rice page 199). Bittman teaches that oils are added to the rice both prior to, for cooking, as well as after cooking (page 207 all).

Regarding the food product as long grain rice, as Komatsu teaches that the process and packaging are to be utilized for food articles that are intended to be highly preservable and that enzymatically brown and lose natural colors, flavor, and texture upon conventional heat sterilization processes and as admitted by applicant, rice was a

Art Unit: 1794

food product which was known to lose natural colors, flavor, and texture upon conventional heat sterilization processes, it would have been obvious to one of ordinary skill in the art to use rice as the food product in the package of Komatsu. One would have been further motivated to use rice within the package of Komatsu when a rice product was desired. It would have been further obvious to one of ordinary skill in the art at the time the invention was made for the rice to be long grain rice as long grain rice was produced most and thus would be expected to be readily available and/or in order to form a final rice product which had separate fluffy and crumbly dry kernels in view of applicant's admission and the teachings of Bittman.

Regarding the rice as washed with purified water, it would have been obvious to one of ordinary skill in the art at the time the invention was made to wash the rice with water in order to minimize starch losses and/or open up the structure of the grain in order to facilitate heat transfer and water uptake during blanching as taught by Meyer. It would have been further obvious to one of ordinary skill in the art at the time the invention was made for the water to be purified in order to prevent impurities from contacting and/or sticking to the rice.

Regarding the rice as coated with a solution of emulsified oil after washing and before draining, it would have been obvious to one of ordinary skill in the art at the time the invention was made to coat the rice with an emulsified oil at a processing step prior packaging and sterilization because to do so is desirable and contributes to the production of an improved rice product as taught by Meyer. Specifically regarding the oil coating as applied after washing, but prior to water draining, applicant is reminded that a recitation of the method of making the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. Although the reference does not explicitly teach coating the rice with emulsified oil after washing the rice in water and prior to draining the water from the rice, the reference teaches that the rice is coated with the emulsified oil prior to packaging and sterilization and that washing and draining of the rice is also performed prior to packaging. It is not believed that switching the order of washing, oil coating, and water draining would make a patentable distinction to

Art Unit: 1794

the claims and thus the claimed invention would have been obvious as the recited processing steps are performed prior to packaging and sterilization, absent any clear and convincing evidence and/or arguments to the contrary. Applicant is referred to the MPEP 2144.04 and reminded that selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results. The end product obtained in the process of Komatsu in view of Meyer is a cooked and sterilized product just as in the claimed process. Alternatively, it would have been obvious to one of ordinary skill in the art at the time the invention was made to coat the rice with the emulsified oil after washing with water and before water draining, so that when the water was drained from the rice, excess oil would also be drained from the rice.

Regarding removing water from the long grain rice prior to packaging the long grain rice, Meyer, Column 2 lines 54-67, teaches that water is removed from the rice prior to packaging. It would have been obvious to one of ordinary skill in the art at the time the invention was made to remove the excess water from the rice prior to placing the rice in a package in order to prevent excess water in the final packaged product.

Regarding adding an amount of a solution of emulsified oil to the sterilized rice before the step of cooking and the rice as cooked in a solution of emulsified oil, it would have been obvious to one of ordinary skill in the art to add an oil to the cooking solution and/or the rice immediately prior to cooking so that the rice would be cooked in the oil and would not stick as taught by Bittman. One would have been further motivated for the oil to be emulsified in order to add in the oil sticking the rice as taught by Meyer so that it would better function.

Regarding adding the same amount of the emulsified oil solution to the rice after cooking, it would have been obvious to one of ordinary skill in the art to add oil to the rice after cooking to provide flavoring to the cooked product as taught by Bittman. One would have been further motivated for the oil to be emulsified in order to add in the oil sticking the rice as taught by Meyer so that it would better function. Additionally, it would have been further obvious to one of ordinary skill in the art for the flavoring oil to be the same and/or different as the cooking oil depending on the oil flavoring desired in the final product. One would have been motivated for the oil to be the same before and

Art Unit: 1794

after cooking in order to form a final product with a consistent oil flavor and so that only one emulsified oil solution need be produced. Specifically regarding the amount of emulsified oil solution applied to the rice product, it would have been further obvious to one of ordinary skill in the art for the amount of flavoring oil to be the same and/or different amounts as the cooking oil depending on the amount of oil added for cooking in order to prevent sticking and the amount of oil flavoring desired in the final product. To vary the amount of a known ingredient for its known and intended function would have been obvious and routine determination to one of ordinary skill in the art.

Regarding sealing and packaging the resultant cooked rice, it would have been obvious to seal and package the rice after cooking in order to form a final cooked product that could be stored and was ready to eat when desired; i.e. to form a final product that only needed reheated and not cooked for consumption as taught by Meyer.

Response to Arguments

Applicant's arguments filed February 5, 2010 have been fully considered but they are not persuasive.

Applicant argues that the references of record do not teach of the newly added limitations. Applicant's argument is not convincing; The newly added limitations have been addressed above.

Applicants argue the references do not teach the sterilization step as instantly claimed. This argument is not convincing. As stated above, Komatsu teaches that the sterilization after filling into a container is at a temperature of 130-160C, high pressure, and a sterilization time of 30 seconds-15 minutes and Claim 4 recites a sterilization step, which occurs 4-10 times repeatedly for 4-8 seconds. Since the sterilization step, as instantly claimed, occurs repeatedly and without interruption, one of ordinary skill in the art would expect that the sterilization step, as instantly claimed, would be functionally equivalent to a one-time sterilization process occurring for 16 to 80 seconds, absent any clear and convincing arguments to the contrary. Alternatively it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform either one or many sterilization steps until the desired result was

Art Unit: 1794

achieved, and one of ordinary skill in the art would expect both processes to yield equally effective results.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KELLY BEKKER whose telephone number is (571)272-2739. The examiner can normally be reached on Monday through Friday 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kelly Bekker/
Examiner
Art Unit 1794